

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number
WO 2004/110159 A1

(51) International Patent Classification⁷: A23C 21/02,
21/08, A23K 1/08, 1/16, 1/18, 1/00

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(21) International Application Number:
PCT/NL2004/000430

(22) International Filing Date: 17 June 2004 (17.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
1023689 18 June 2003 (18.06.2003) NL

(71) Applicant (for all designated States except US):
Humelco-Lux AG [LU/LU]; 117, Route de Stavelot,
L-9991 Weiswampach (LU).

(72) Inventor; and

(75) Inventor/Applicant (for US only): HUETING, Ulco
[NL/BE]; Herresbach 42, B-4770 Amel (BE).

(74) Agent: WINCKELS, J.H.F.; VEREENIGDE, c/o Nieuwe
Parklaan 97, NL-2587 BN Den Haag (NL).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report.
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LIQUID MILK-SUBSTITUTING FOOD CONCENTRATE, METHODS FOR THE PREPARATION THEREOF AND
FOOD PREPARED THEREWITH

(57) Abstract: The present invention relates to a liquid milk-substituting food concentrate based on milk whey and/or derivatives derived therefrom and to methods for the preparation thereof, which concentrate can inter alia be very suitably used for the preparation of calf milk which has a good storage stability and which can obviate many of the drawbacks of conventional calf milk. In a liquid milk-substituting food concentrate based on milk whey according to the invention, lactose has been converted for more than 25% by conversions comprising at least a lactic acid fermentation. Further, the food concentrate comprises one or more organic acids other than lactic acid which have been added in a ratio of organic acid: lactic acid of 1:30 to 8:1.

WO 2004/110159 A1